

Amendment Pursuant to 37 CFR 1.111
U.S.S.N 09/413,792
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REMARKS

This is in response to the Official Action dated March 11, 2004. Reconsideration and allowance of the present application are respectfully requested.

Claim Amendments

Independent claims 1 and 11 have been amended to more particularly point out that the claimed invention does not include a separate current source coupled to the claimed electrical power connector on the landmass associated with the electrical power connector. Support for this amendment may be found throughout the specification and drawings, e.g. in FIGS. 5-7, page 9, lines 18-23, page 10, lines 8-9, etc.

Applicant has also added new claims 20-23, which are directed to specific embodiments of the claimed electrical power connector. Support for these additional claims may be found, for example, at page 6, line 14 to page 7, line 3 and in FIG. 2. No new matter has been added.

35 U.S.C. §102 Rejection

Claims 1, 5, 6, 9 and 10 have been rejected under 35 U.S.C. § 102(b) as being anticipated by Crameri et al. (U.S. Patent No. 6,166,836). Applicant respectfully traverses this rejection.

Crameri teaches another example of a submarine branching unit. The branching unit may be located in the sea for connecting optical cables emanating from "transmit/receive" stations. FIG. 1, and Col. 3, lines 24-31. Three "transmit/receive" stations, i.e. stations 20, 22 and 28, are coupled directly to the branching unit 10 via cables 16, 18 and 24, respectively. Figure 1 of Crameri is reproduced below.

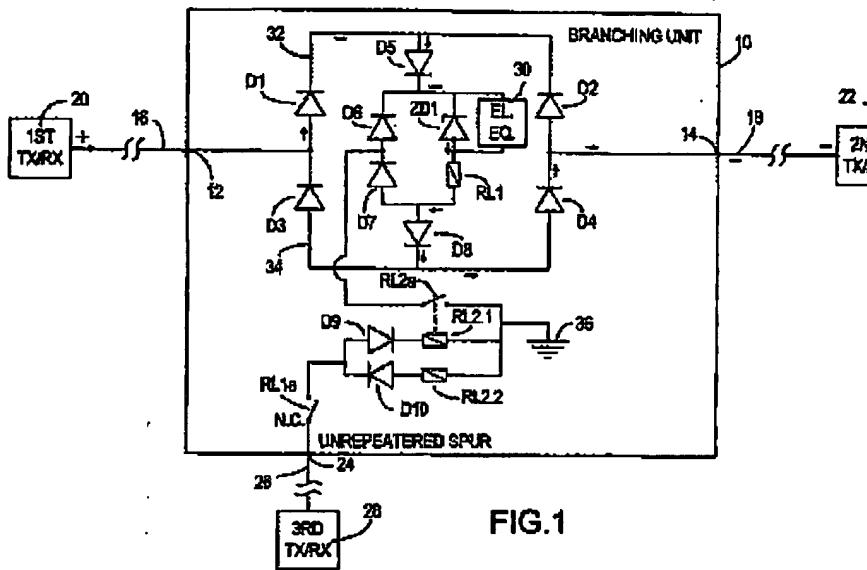


FIG.1

U.S. Patent
 Des. 3,276,000
 Serial No. 10/135
 6,166,836

Cramer specifically states, with reference to FIG. 1, that each of the "transmit/receive" stations 20, 22, and 28 feeds current to the branching unit 10:

"FIG. 1 shows the normal operation of the circuit in the absence of a trunk fault. The arrows indicate, in terms of conventional current, the direction of current flow when a positive potential is applied from station 20 and a negative potential from station 22" (Col. 3, line 66 to Col. 4, line 3) (emphasis added); and

"In order to reestablish a flow of current from the trunk section 16 a negative potential is applied by the spur station 28..." (Col. 4, lines 13-15) (emphasis added).

Each "transmit/receive" station 20, 22 and 28 in Cramer thus acts as a current source coupled directly to the branching unit.

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In complete contrast, independent claim 1 requires a configuration including a first cable for carrying data signals between "a first landmass and a second landmass", a second cable for carrying data signals between "the first landmass and a third landmass", and an electrical power connector "located on said first landmass" for connecting power conductors of the first and second cables "wherein no separate current source is coupled to said electrical power connector on said first landmass." (emphasis added). This configuration advantageously eliminates the need for power feed equipment, e.g. at the first landmass. This is confirmed in the specification with at page 9, lines 18-21 respect to the exemplary embodiment of FIG. 5:

..[T]he devices of two cable segments 505a and 505b may be powered by a single pair of power feed equipment 507a and 507b, providing significant savings in installing and operating the communication system using these cable segments.

Applicant finds nothing in Crameri that teaches or suggests a system including a first cable for carrying data signals between "a first landmass and a second landmass", a second cable for carrying data signals between "the first landmass and a third landmass", and a connector "located at the first landmass" for connecting power conductors of the first and second cables "wherein no separate current source is coupled to said electrical power connector on said first landmass." as required by independent claim 1. Crameri clearly requires that each of the "transmit/receive" stations 20, 22, 28 be coupled to the branching unit 10 to act as a current source. If the branching unit 10 is located on a landmass and the "first" and "second" cables are cables 16 and 18, respectively, as suggested by the Examiner, then "transmit/receive" station 28 would be a current source coupled to the connector on the first landmass. Claim 1, however, specifically requires a configuration "wherein no separate current source is coupled to said electrical power connector on said first landmass."

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In view of the fact that Crameri fails to teach or suggest, either explicitly or implicitly, a connector "located on said first landmass" for connecting power conductors of the first and second cables "wherein no separate current source is coupled to said electrical power connector on said first landmass", as specifically required by claim 1, Applicant respectfully submits that the rejection of claim 1 under 35 USC § 102(b) cannot stand.

Claims 5, 6, 9 and 10 depend from claim 1. These claims are in condition for allowance by virtue of their dependency for the reasons adduced above, as well as for their own limitations. For example, claim 9 requires that the signal carrying lines of the first cable are "communicatively isolated" from the lines of the second cable. Claim 10 specifically requires that the signal carrying lines of the first cable "carry different signals" from the lines of the second cable. Crameri is completely devoid of any teaching or suggestion of "communicatively isolating" the data carrying lines of cables, as required by claim 9, or of different signals being carried on separate cables, as required by claim 10.

Crameri discusses power connections without ever addressing connectivity of data carrying cables, and the Examiner has not pointed to any portion of Crameri that specifically teaches or suggest the connections required by claims 9 and 10. The Examiner only speculates that the cables "can be" communicatively isolated, or that the signals on the cables "could be" different. Crameri does not directly or inherently teach these limitations.

Accordingly, Applicant respectfully requests that the rejection of claims 1, 5, 6, 9 and 10 under 35 U.S.C. § 102(b), as being anticipated by Crameri (U.S. Patent No. 6,166,836) be withdrawn upon reconsideration.

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35 U.S.C. §103 Rejection

Claims 2-4, 7, 8 and 11-15 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Crameri in view of the prior art figures submitted by the applicant. Applicant respectfully traverses this rejection.

Independent claim 11, as amended, requires a “plurality of cable segments” that are electrically connected “in series” between a positive terminal of a first piece of power equipment on a “first landmass” and a negative terminal of a second piece of power feed equipment on a “second landmass” by at least one “electrical power connector located on at least one additional landmass”, “wherein no separate current source is coupled to said electrical power connector on said at least one additional landmass.”

There is nothing in Crameri that would have led one skilled in the art to the claimed invention at the time it was made. As discussed above, Crameri specifically teaches that each “transmit/receive” station coupled to the branching unit should act as a current source. Crameri thus fails to teach or suggest essential limitations of the claimed invention. Applicant’s prior art figures do not provide the missing teachings. In fact, Crameri’s teaching that each “transmit/receive” station coupled to the branching unit should act as a current source teaches away from the claimed invention which requires that “no separate current source is coupled to said electrical power connector on said at least one additional landmass”.

Accordingly, it is respectfully submitted that the rejection of claims 11-15 under 35 U.S.C. § 103(a) as being unpatentable over Crameri in view of applicant’s prior art figures should be withdrawn upon reconsideration. Claims 2-4, 7 and 8 depend, either directly or

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ultimately, from independent claim 1 which is allowable over Crameri combined with applicant's prior art figures for the reasons adduced above, as well as for their own limitations. Accordingly, it is requested that the rejection of claims 2-4, 7 and 8 under 35 U.S.C. §103(a) in view of Crameri and applicant's prior art figures also be withdrawn upon reconsideration.

In light of the foregoing remarks, it is believed that all of the presently pending claims are in a condition for allowance. Allowance of the application is respectfully requested. In the event the Examiner deems personal contact desirable in disposition of this application, the Examiner is respectfully requested to call the undersigned attorney at (603)-668-6560.

No fees are believed to be due. In the event there are any fee deficiencies, please charge them (or credit any overpayment) to our Deposit Account No. 50-2121.

Respectfully submitted,

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